Fully Mitigated University is Prepared for Disasters

Full Mitigation Best Practice Story

Los Angeles County, California

Malibu, CA – When the Canyon Fire came roaring through Malibu Canyon in October 2007, Pepperdine University's Malibu campus was ready. The sprawling 830-acre campus and its buildings are mitigated as much as possible against fire, so much so that administration, staff, and students can feel safe if they are not able to leave the school grounds when a wild fire approaches.

The Canyon Fire burned 4,500 acres in Malibu Canyon. Six homes and a church were destroyed. It was the first of 24 wildfires that occurred in October 2007 in seven Southern California counties, and the first wildfire to receive significant media attention. The fire, which raged onto the university's undeveloped land in the early morning hours of October 21, was turned back at the edges of the school's sprawling defensible space and stopped by city, county, and state firefighters aided by helicopters and fixed-wing aircraft.

Los Angeles County Fire Department personnel staged their fire operations on and around the Malibu campus while fighting the Canyon Fire. The university was used as a base for 500 firefighters and provided a grassy area that helicopters used in the process of making air drops on the fire. The school provided water from its water tanks for use by firefighters.

The university has developed detailed procedures for dealing with emergency incidents and has its own Emergency Operations Center (EOC) for use during emergencies. Fire agencies consider the campus to be so safe that they set up an EOC for firefighting operations in one of the campus buildings.

Because of advanced planning, mitigation of structures, and wide expanses of defensible space, effects of the fire in October 2007 were greatly reduced. Flying embers, however, were the cause of problems on the Malibu campus. A small building about one mile from the administration building caught fire and was destroyed. Three vehicles, belonging to staff members that were parked on a lot in front of the administration building, were set on fire by burning brush.

On the first day of the Canyon Fire, all faculty and students who were on campus were notified of the approach of the fire and were provided information through the university's new emergency notification network about relocating from dorms and classrooms to designated shelters on campus.

Faculty, staff, and students off campus, as the fire approached, were urged by the Los Angeles County Fire Department to not return. Pepperdine officials continued to provide status updates through the school's notification network to staff and students on campus about the fire throughout the day and also advised everyone that classes were going to be cancelled the next day. The alert system was rolled out with the start of the fall semester in 2007 and was tested successfully just ahead of the fire. Student response to the alert system has been positive, with many commenting on how the system provided accurate information and cleared confusion, which can result in time of emergencies, administrators said.

The Malibu campus has its own emergency generators, strategically placed water tanks (the biggest contains 3 million gallons of water), and a large supply of non-perishable food. Pepperdine University has the capability to feed and lodge 5,000 students, staff, and administrators for as long as two weeks, administrators said.

All buildings on the 360-developed acres of the property are constructed to standards higher than required by current Los Angeles County building codes. Facilities include the five schools, administration buildings, faculty apartments, student dormitories, and water storage tanks. All buildings are also structurally mitigated beyond what is required by code to resist effects of earthquakes, with structures built around steel members sunk deeply into the ground. Slopes are stabilized to reduce possibilities of mud and debris flows.

Pepperdine University's administration takes the position that they can always improve the campus' ability to successfully manage fires and other types of disasters. University administrators say they have always considered an all-hazards perspective and constantly search for new ways to make things even better.

"Pepperdine's success is attributed to its people," said Andrew Benton, chief executive officer for the university. The school's president and board of regents provide all the funding that is needed to institute changes and programs designed to protect people and facilities.

Not only are university administrators, faculty, and staff working towards enhancing survival measures from earthquakes, high winds, wildfires, flooding, and geological hazards, university personnel are trained in all aspects of emergency procedures and conduct exercises to test operations plans.

The cost of building a safe campus is miniscule when compared to the cost of having to replace buildings that were not built to the highest possible standard.

Activity/Project Location

Geographical Area:	**Single County in a State**
FEMA Region:	**Region IX**
State:	**California**
County:	**Los Angeles County**
City/Community:	**Malibu**

Key Activity/Project Information

Sector:	**Public**
Hazard Type:	**Fire**
Activity/Project Type:	**Building Codes; Vegetation Management; Mitigation Planning/Disaster Resistant Universities**
Structure Type:	**Masonry, Reinforced**
Activity/Project Start Date:	**01/2006**
Activity/Project End Date:	**01/2007**
Funding Source:	**Academic**
Funding Recipient:	**Academic**
Funding Recipient Name:	**Pepperdine University**

Activity/Project Economic Analysis

Cost:	**Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal Disaster? **No**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1731 , 10/24/2007**

Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: **http://www.fema.gov/library/viewRecord.do?id=1565**

Main Points

No Main Points were entered.

he Pepperdine Campus has interior defensible space

Pepperdine University's Administration Building